

ABSTRACT

A thin film transistor array substrate has a gate electrode of the thin film transistor, a gate line connected to the gate electrode, and a gate pad connected to the gate line; a source/drain pattern including a source electrode and a drain electrode of the thin film transistor, a data line connected to the source electrode, a data pad connected to the data line, a storage electrode formed and superimposed with the gate line; a semiconductor pattern formed in low part of the substrate; a transparent electrode pattern including a pixel electrode connected to the drain electrode and the storage electrode, a gate pad protection electrode covering the gate pad, and a data pad protection electrode covering the data pad; and a protection pattern and a gate insulation pattern stacked in a region other than the region where the transparent electrode pattern is formed.